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Smith College, 44 College Lane, Northampton, MA 01060. *Webs and the geometry of Springer  
fibers*. Preliminary report.

Webs encode quantum representations of  $\mathfrak{sl}_k$  using certain planar graphs. The Springer fiber for a matrix  $X$  consists of the flags fixed by  $X$  in the sense that  $X$  sends each part of the flag into itself. It turns out that the components of certain Springer fibers correspond to webs for some  $k$ . We show natural linear-algebraic correspondences between webs and cells of these Springer fibers and give some partial results describing the closures of these cells in terms of the combinatorics of webs. (Received January 29, 2019)